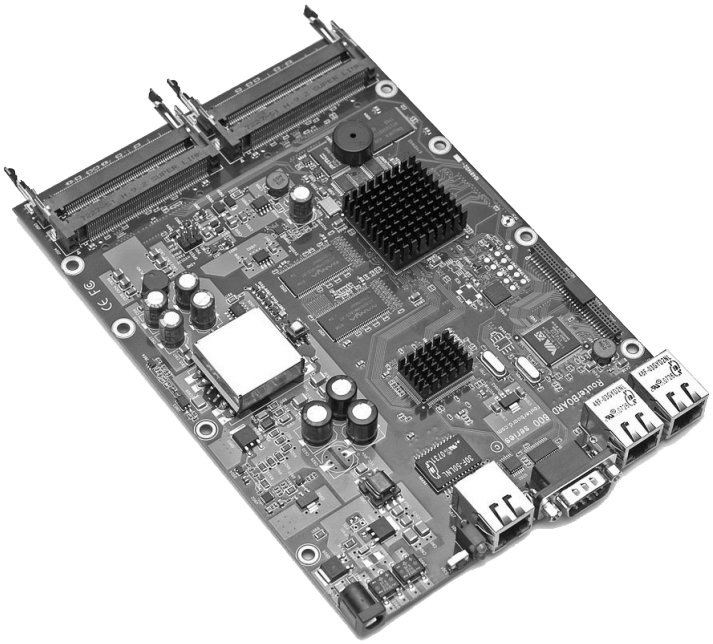
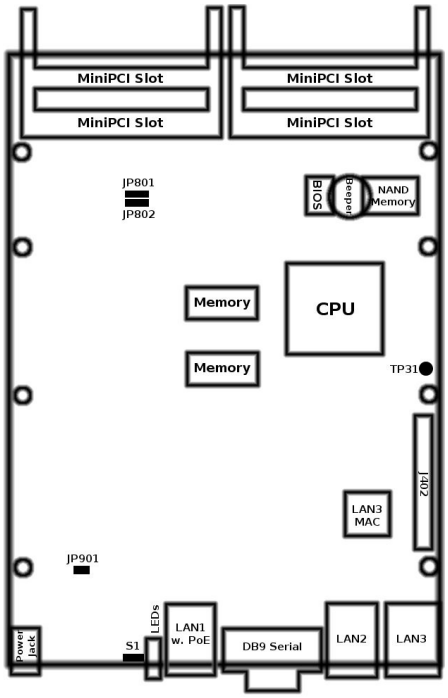
RouterBOARD 600
Quick Setup Guide and Warranty Information



Assembling the Hardware

First use of the board:

- In most cases you do not need to use any additional boot devices, as you can boot the RouterBOARD from the onboard NAND memory. You can also install one or two CompactFlash modules or Microdrive hard drives, which you can use as an alternative boot device (in **J301** slot only) or additional storage media (in any or both slots);
- Insert MiniPCI cards on the board itself, and on the daughterboard if you have one;
- Install the board in a case, connect and secure the daughterboard and connect antenna wires, if needed;
- Connect other peripherals and cables.



Powering

The board accepts powering from either the power jack or the LAN1 Ethernet port:

- direct-input power jack **J901** (5.5mm outside and 2mm inside diameter, female, pin positive plug) accepts 10..56 V DC.
- LAN1 Ethernet port **J701** accepts 38..56 V DC input (at the board; higher voltage needed to compensate for power loss on long cables; 48V suggested) from Power over Ethernet injectors. The board works with IEEE802.3af compliant 48V power injectors.

The maximum output of the power supply to the extension cards is normally at about 25W (7.5A at 3.3V), however with appropriate cooling, the onboard power supply is capable to provide higher power output to the extension cards.

Booting process

First, RouterBOOT loader is started. It displays some useful information on the onboard RS232C asynchronous serial port. The serial port is set by default to 115200bit/s, 8 data bits, 1 stop bit, no parity. **Note** that the device does not fully implement the hardware (RTS/CTS) flow control, so it is suggested to try to disable hardware flow control in the terminal emulation program in case the serial console does not work as expected, and if it does not help, make a new cable using the pinout given in the User's manual. The loader may be configured to boot the system from the onboard NAND, and/or from network. See the respective section of User's manual on how to configure booting sequence and other BIOS parameters.

DHCP or BOOTP (configurable in loader) protocols allow the RouterBOARD 600 series board to get an initial IP address, and provide the address of a TFTP server to download an ELF boot image from. It is especially useful for software installation. See the User's manual for more information and protocol details. Note that you must connect the RouterBOARD you want to boot and the BOOTP/DHCP and TFTP servers to the same broadcast domain (i.e., there must not be any routers between them – they must be on the same Ethernet switch).

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Extension Slots and Ports

- Three Gigabit Ethernet ports, supporting automatic cross/straight cable correction (Auto MDI/X), so you can use either straight or cross-over cables for connecting to other network devices. The first Ethernet port accepts 38..56 V DC powering from a PoE injector. The other two Ethernet ports **do not** support PoE powering.
- Four MiniPCI Type IIIA/IIIB ports with 3.3V power signaling.
- DB9 RS232C asynchronous serial port.

Operating System Support

Currently tested operating system is MikroTik RouterOS (starting from version 3.0rc1).

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Hardware. MikroTikls SIA warrants all RouterBOARD series equipment for the term of one year from the shipping date to be free of defects in materials and workmanship under normal use and service. All parts will be repaired or replaced with similar or functionally equivalent parts by MikroTikls SIA during the warranty term, except in case the returned parts have mechanical, electrical or other accidental or intended damages caused by improper use or due to wind, rain, fire or other acts of nature.

Parts (or systems) must be shipped pre-paid to our facility in Riga, Latvia. All items must have a Return Material Authorization (RMA) which you can get by contacting us via email, telephone or fax. RMA must be printed, signed, and enclosed with the shipment, also the RMA number must be written on the package itself. Parts sent without following the proper procedure will be treated as those not to be repaired or replaced due to the above mentioned conditions. Items proved to be free of defects in our lab will be returned to the customer at the customer's expense. Those that do meet the warranty repair requirements will be repaired or replaced, and returned to the customer's location at our expense, extending the warranty term for the time the items are being shipped to and from our facility and replaced or repaired.

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